## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/29949

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : H03K 9/00; H04L 27/06		
US CL : 375/316		
According to International Patent Classification (IPC) or to both n	ational classification and IPC	
B. FIELDS SEARCHED		
	L. Janification membals)	
Minimum documentation searched (classification system followed	by classification symbols)	
U.S. : 375/316		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Documentation searched other than minimum documentation to the	e extent that such documents are included in the fields searched	
Electronic data base consulted during the international search (name	ne of data base and, where practicable, search terms used)	
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category * Citation of document, with indication, where ap	propriate, of the relevant passages Relevant to claim No.	
Y US 6,359,938 B1 (Keevill et al.) 19 March 2002 (19		
lines 55-67; col. 20, lines 10-67; col. 21, lines 1-67	7: col. 60. lines 1-67	
V 110 6 247 123 Pt (Mathe et al.) 12 February 2002 (	1 19 17 20	
1 US 0,347,125 B1, (Wattle et al.) 12 February 2002 (	Y US 6,347,123 B1, (Mathe et al) 12 February 2002 (12.02.2002), Figs. 1, 7, 8, column 1, lines 20-58; col. 4, lines 12-63; col. 5, lines 2-60; col. 10, lines 28-65; col. 11, lines 1-57	
imes 20-38; coi. 4, imes 12-03, coi. 3, imes 2-00, t	201. 10, 1 mcs 20-05, col. 11, 1 mcs 1 57	
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Further documents are listed in the continuation of Box C.	See patent family annex.	
Special categories of cited documents:	"T" later document published after the international filing date or	
, -	priority date and not in conflict with the application but cited to	
"A" document defining the general state of the art which is not considered to	understand the principle or theory underlying the invention	
be of particular relevance	"X" document of particular relevance; the claimed invention cannot be	
"E" earlier application or patent published on or after the international filing	considered novel or cannot be considered to involve an inventive	
date	step when the document is taken alone	
-L" document which may throw doubts on priority claim(s) or which is cited	"Y" document of particular relevance; the claimed invention cannot be	
to establish the publication date of another citation or other special reason	considered to involve an inventive step when the document is	
(as specified)	combined with one or more other such documents, such	
	combination being obvious to a person skilled in the art	
"O" document referring to an oral disclosure, use, exhibition or other means	"A" document member of the same patent family	
*P" document published prior to the international filing date but later than the		
priority date claimed	Date of mailing of the international search report	
Date of the actual completion of the international search		
04 1	02 FEB 2004	
04 January 2004 (04.01.2004)	Authorized officer ()	
Name and mailing address of the ISA/US	Addition the same freely	
Mail Stop PCT, Atm: ISA/US	Mohammed Ghayour	
Commissioner for Patents		
P.O. Box 1450 Alexandria, Virginia 22313-1450	Telephone No. 703 305-4750	
Facsimile No. (703)305-3230		

Form PCT/ISA/210 (second sheet) (July 1998)

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)		
This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:		
Claim Nos.: because they relate to subject matter not required to be searched by this Authority, namely:		
2. Claim Nos.:  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:		
3. Claim Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).		
Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)		
This International Searching Authority found multiple inventions in this international application, as follows: Please See Continuation Sheet		
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:		
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-8, 17-20  Remark on Protest		

INTERNATIONAL SEARCH REPORT	PCT/US03/29949	
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BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS L	ACKING	
This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.		
Group I, claim(s) 1-8 and 17-20, drawn to RF circuit that receives classified in Class 375 subclass 316.		
Group II, claim(s) 9-16, drawn to Transceiver, classified in 375 subclass 219.		
The inventions listed in Groups I and II do not relate to a single general inventive concept under the PCT Rule 13.1 because under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The receive circuit for claims in Group I pertains to a receiver whereas the claims in Group II pertains to a transceiver with transmit and receive techniques.		
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